

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	252	398/118.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/13 09:19
L2	5165	intracavity or intra-cavity	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/13 09:20
L3	6073	broad adj (area or emitter)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/13 09:20
L4	139	L2 and L3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/13 09:20
L5	12	(2 and 3).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/13 09:21
L6	397	398/119,158.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/13 09:21
L7	117	398/169,170.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/13 09:26
L8	418	ruggiero.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/13 09:27
L9	17	ruggiero-anthony-\$..in. or ruggiero-anthony.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/13 09:27
L10	3	("2001/0035995").URPN.	USPAT	OR	OFF	2007/02/13 09:27
S1	2	"5038359".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/13 09:19
S2	35	twin with (dfb or (distributed adj feed\$4))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/01/31 10:48

## EAST Search History

S3	194	twin adj contact	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/01/31 10:50
S4	0	S3 with laser\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/01/31 14:20
S5	1	S3 same laser\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/01/31 10:50
S6	698737	spectr\$7	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/01/31 11:00
S7	1023031	inver\$7	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/01/31 11:01
S8	3045	S6 near2 S7	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/01/31 11:01
S9	620	laser\$1 and S8	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/01/31 14:19
S10	2242	retroreflect\$4.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/01/31 14:21
S11	346	S10 and laser\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/01/31 14:20
S12	107	retroreflect\$4 with (micromirror\$1 or micro-mirror\$1 or (micro adj mirror\$1))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/01/31 14:21
S13	2	"20040066821".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/24 12:47
S14	2	"6625195".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/24 13:05

## EAST Search History

S15	4657	intracavity or intra-cavity	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/24 13:08
S16	5627	broad adj (area or emitter)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/24 13:14
S17	122	S15 and S16	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/13 09:20
S18	22	("4220928"   "4233571"   "4309670"   "4321550"   "4493086"   "4521075"   "4529273"   "4682340"   "4794344"   "4837769"   "5023477"   "5033054"   "5170407"   "5206872"   "5255278"   "5263041"   "5341390"   "5513203"   "5729380"   "5822356"   "5982802"   "6339607").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/04/24 13:50

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	2	"5,519,723".pn.	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/18 09:14
S2	2	"5038359".pn.	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/18 09:14
S3	10	(("5038359") or ("5140463") or ("5371368") or ("5451785") or ("5519723") or ("5576627") or ("5578185") or ("5625458") or ("5738101") or ("5936739")).PN.	USPAT; USOCR	OR	OFF	2002/11/17 13:42
S4	10	((("5038359") or ("5140463") or ("5371368") or ("5451785") or ("5519723") or ("5576627") or ("5578185") or ("5625458") or ("5738101") or ("5936739")).PN.	USPAT; USOCR	OR	OFF	2001/08/13 09:08
S5	5	((("5038359") or ("5140463") or ("5371368") or ("5451785") or ("5519723") or ("5576627") or ("5578185") or ("5625458") or ("5738101") or ("5936739")).PN.) and conjugat\$4	USPAT	OR	OFF	2001/08/13 13:46
S6	318	(phase adj conjugat\$4) with mirror\$1	USPAT	OR	OFF	2001/08/13 13:48
S7	317	optic\$4 and ((phase adj conjugat\$4) with mirror\$1)	USPAT	OR	OFF	2001/08/14 10:44
S8	103	fiber\$1 and ((phase adj conjugat\$4) with mirror\$1)	USPAT	OR	OFF	2001/08/13 14:38
S9	59	(fiber\$1 and ((phase adj conjugat\$4) with mirror\$1)) and (transmit\$7 and receiv\$4)	USPAT	OR	OFF	2001/08/13 14:43
S10	13	((fiber\$1 and ((phase adj conjugat\$4) with mirror\$1)) and (transmit\$7 and receiv\$4)) and electrode\$1	USPAT	OR	OFF	2001/08/14 09:02
S11	13	((fiber\$1 and ((phase adj conjugat\$4) with mirror\$1)) and (transmit\$7 and receiv\$4)) and electrode\$1	USPAT	OR	OFF	2001/08/14 09:07
S12	317	optic\$4 and ((phase adj conjugat\$4) with mirror\$1)	USPAT	OR	OFF	2001/08/14 10:24
S13	967	(micro-mirror\$1 or micromirror\$1)	USPAT	OR	OFF	2001/08/14 10:26
S14	3	((micro-mirror\$1 or micromirror\$1) and (optic\$4 and ((phase adj conjugat\$4) with mirror\$1) )	USPAT	OR	OFF	2001/08/14 10:26
S15	130	phase adj conjugator\$1	USPAT	OR	OFF	2001/08/14 13:55
S16	15	(phase adj conjugator\$1) with array\$1	USPAT	OR	OFF	2001/08/14 10:44

## EAST Search History

S17	47	phase adj conjugators	USPAT	OR	OFF	2001/08/14 14:22
S18	28	(phase adj conjugators) and ((four adj wave) or (four-wave))	USPAT	OR	OFF	2001/08/14 14:21
S19	2	(phase adj conjugators) and (vcsel)	USPAT	OR	OFF	2001/08/14 14:21
S20	130	phase adj conjugator\$1	USPAT	OR	OFF	2001/08/14 15:37
S21	2	(phase adj conjugator\$1) and vcsel	USPAT	OR	OFF	2001/08/14 14:38
S22	3	((phase adj conjugat\$4) and vcsel) not ((phase adj conjugator\$1) and vcsel)	USPAT	OR	OFF	2001/08/14 14:48
S23	5	(phase adj conjugat\$4) and vcsel	USPAT	OR	OFF	2001/08/14 15:03
S24	24	(phase adj conjugator\$1) and (transmitter or transceiver)	USPAT	OR	OFF	2001/08/14 15:37
S25	12	("4326800"   "4376950"   "4490039"   "4764982"   "4943709"   "4963725"   "4987607"   "5021643"   "5046824"   "5048935"   "5083015"   "5102214").PN.	USPAT	OR	OFF	2001/08/15 08:57
S26	5	("3989942"   "4099050"   "4763361"   "4767195"   "5001488").PN.	USPAT	OR	OFF	2001/08/15 09:20
S27	7	"5317442".URPN.	USPAT	OR	OFF	2001/08/15 09:37
S28	0	vcsel and ((US "5317442" A US "5448052" A ).pn.)	USPAT	OR	OFF	2001/08/15 10:18
S29	2	(US "5317442" A US "5448052" A ).pn.	USPAT	OR	OFF	2001/08/15 10:25
S30	2	"5448052".URPN.	USPAT	OR	OFF	2001/08/15 10:18
S31	1	((US "5317442" A US "5448052" A ).pn.) and mix\$4	USPAT	OR	OFF	2001/08/15 10:27
S32	23	(US "5038359" A US "6128118" A US "5798853" A US "5694239" A US "5378888" A US "5317442" A US "5448052" A US "5223838" A US "4949056" A US "5738101" A US "5519723" A US "6072608" A US H001625 H US "5162872" A US "5986234" A US "5532868" A US "5048935" A US "5046824" A US "4987607" A US "4767195" A US "5155542" A US "5031234" A US "4233606" A ).pn.	USPAT	OR	OFF	2001/08/15 10:27

## EAST Search History

S33	14	((US "5038359" A US "6128118" A US "5798853" A US "5694239" A US "5378888" A US "5317442" A US "5448052" A US "5223838" A US "4949056" A US "5738101" A US "5519723" A US "6072608" A US H001625 H US "5162872" A US "5986234" A US "5532868" A US "5048935" A US "5046824" A US "4987607" A US "4767195" A US "5155542" A US "5031234" A US "4233606" A ).pn.) and (four-wave or (four adj wave))	USPAT	OR	OFF	2001/08/15 10:28
S34	11	((US "5038359" A US "6128118" A US "5798853" A US "5694239" A US "5378888" A US "5317442" A US "5448052" A US "5223838" A US "4949056" A US "5738101" A US "5519723" A US "6072608" A US H001625 H US "5162872" A US "5986234" A US "5532868" A US "5048935" A US "5046824" A US "4987607" A US "4767195" A US "5155542" A US "5031234" A US "4233606" A ).pn.) and (array\$1)	USPAT	OR	OFF	2001/08/15 12:59
S35	7	((US "5038359" A US "6128118" A US "5798853" A US "5694239" A US "5378888" A US "5317442" A US "5448052" A US "5223838" A US "4949056" A US "5738101" A US "5519723" A US "6072608" A US H001625 H US "5162872" A US "5986234" A US "5532868" A US "5048935" A US "5046824" A US "4987607" A US "4767195" A US "5155542" A US "5031234" A US "4233606" A ).pn.) and (array\$1 with (conjg\$6 or \$2pcm or \$2pcms))	USPAT	OR	OFF	2001/08/15 10:33
S36	5	((US "5038359" A US "6128118" A US "5798853" A US "5694239" A US "5378888" A US "5317442" A US "5448052" A US "5223838" A US "4949056" A US "5738101" A US "5519723" A US "6072608" A US H001625 H US "5162872" A US "5986234" A US "5532868" A US "5048935" A US "5046824" A US "4987607" A US "4767195" A US "5155542" A US "5031234" A US "4233606" A ).pn.) and electrode\$1	USPAT	OR	OFF	2001/08/15 10:58

## EAST Search History

S37	6	((US "5038359" A US "6128118" A US "5798853" A US "5694239" A US "5378888" A US "5317442" A US "5448052" A US "5223838" A US "4949056" A US "5738101" A US "5519723" A US "6072608" A US H001625 H US "5162872" A US "5986234" A US "5532868" A US "5048935" A US "5046824" A US "4987607" A US "4767195" A US "5155542" A US "5031234" A US "4233606" A ).pn.) and ghz	USPAT	OR	OFF	2001/08/15 13:53
S38	2	((US "5038359" A US "6128118" A US "5798853" A US "5694239" A US "5378888" A US "5317442" A US "5448052" A US "5223838" A US "4949056" A US "5738101" A US "5519723" A US "6072608" A US H001625 H US "5162872" A US "5986234" A US "5532868" A US "5048935" A US "5046824" A US "4987607" A US "4767195" A US "5155542" A US "5031234" A US "4233606" A ).pn.) and electrode\$1) and aperture	USPAT	OR	OFF	2001/08/15 11:02
S39	1	((US "5038359" A US "6128118" A US "5798853" A US "5694239" A US "5378888" A US "5317442" A US "5448052" A US "5223838" A US "4949056" A US "5738101" A US "5519723" A US "6072608" A US H001625 H US "5162872" A US "5986234" A US "5532868" A US "5048935" A US "5046824" A US "4987607" A US "4767195" A US "5155542" A US "5031234" A US "4233606" A ).pn.) and (micromirror\$1 or micro-mirror\$1 or (micro adj mirror\$1))	USPAT	OR	OFF	2001/08/15 11:03
S40	15	((US "5038359" A US "6128118" A US "5798853" A US "5694239" A US "5378888" A US "5317442" A US "5448052" A US "5223838" A US "4949056" A US "5738101" A US "5519723" A US "6072608" A US H001625 H US "5162872" A US "5986234" A US "5532868" A US "5048935" A US "5046824" A US "4987607" A US "4767195" A US "5155542" A US "5031234" A US "4233606" A ).pn.) and (pump)	USPAT	OR	OFF	2001/08/15 11:03

## EAST Search History

S41	11	((US "5038359" A US "6128118" A US "5798853" A US "5694239" A US "5378888" A US "5317442" A US "5448052" A US "5223838" A US "4949056" A US "5738101" A US "5519723" A US "6072608" A US H001625 H US "5162872" A US "5986234" A US "5532868" A US "5048935" A US "5046824" A US "4987607" A US "4767195" A US "5155542" A US "5031234" A US "4233606" A ).pn.) and (array\$1)	USPAT	OR	OFF	2001/08/15 13:18
S42	1	gain adj stripe adj device\$1	USPAT	OR	OFF	2001/08/15 13:31
S43	12	gain adj stripe	USPAT	OR	OFF	2001/08/15 13:32
S44	0	(gain adj stripe) and (phase with conjugat\$4)	USPAT	OR	OFF	2001/08/15 13:35
S45	1	((US "5038359" A US "5162872" A US "5378888" A US "5317442" A US "5448052" A US "4949056" A US "5738101" A US "5519723" A US "6072608" A US H001625 H US "6128118" A US "5986234" A US "5798853" A US "5694239" A US "5532868" A US "5048935" A US "5046824" A US "4987607" A US "4767195" A US "5223838" A US "5155542" A US "5031234" A US "4233606" A ).pn.) and strip\$4	USPAT	OR	OFF	2001/08/15 13:34
S46	64	(stripe\$1) and (phase with conjugat\$4)	USPAT	OR	OFF	2001/08/15 13:35
S47	4	((stripe\$1) and (phase with conjugat\$4)) and (gain with stripe\$1)	USPAT	OR	OFF	2001/08/15 13:39
S48	9	(conjugat\$4) and (gain with stripe\$1)	USPAT	OR	OFF	2001/08/15 13:39
S49	10	((US "5038359" A US "6128118" A US "5798853" A US "5694239" A US "5378888" A US "5317442" A US "5448052" A US "5223838" A US "4949056" A US "5738101" A US "5519723" A US "6072608" A US H001625 H US "5162872" A US "5986234" A US "5532868" A US "5048935" A US "5046824" A US "4987607" A US "4767195" A US "5155542" A US "5031234" A US "4233606" A ).pn.) and fiber\$1	USPAT	OR	OFF	2001/08/15 13:53

## EAST Search History

S50	23	(US "5038359" A US "5162872" A US "5378888" A US "5317442" A US "5448052" A US "4949056" A US "5738101" A US "5519723" A US "6072608" A US H001625 H US "6128118" A US "5986234" A US "5798853" A US "5694239" A US "5532868" A US "5048935" A US "5046824" A US "4987607" A US "4767195" A US "5223838" A US "5155542" A US "5031234" A US "4233606" A ).pn.	USPAT	OR	OFF	2001/08/15 15:01
S51	1	((US "5038359" A US "5162872" A US "5378888" A US "5317442" A US "5448052" A US "4949056" A US "5738101" A US "5519723" A US "6072608" A US H001625 H US "6128118" A US "5986234" A US "5798853" A US "5694239" A US "5532868" A US "5048935" A US "5046824" A US "4987607" A US "4767195" A US "5223838" A US "5155542" A US "5031234" A US "4233606" A ).pn.) and vcsel	USPAT	OR	OFF	2001/08/15 14:10
S52	2527	stripe\$1 with laser	USPAT	OR	OFF	2001/08/15 14:15
S53	380	stripe\$1 with laser with single	USPAT	OR	OFF	2001/08/15 14:15
S54	33	stripe\$1 with laser with single with gain	USPAT	OR	OFF	2001/08/15 14:16
S55	93	(single adj stripe) with laser	USPAT	OR	OFF	2001/08/15 14:16
S56	53	(single adj stripe) adj2 laser	USPAT	OR	OFF	2001/08/15 14:17
S57	0	((single adj stripe) adj2 laser ) and vcsel	USPAT	OR	OFF	2001/08/15 14:17
S58	1898	phase adj conjugat\$4	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/13 16:04
S59	81	(phase adj conjugat\$4) with (cavity)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/13 16:09
S60	0	(phase adj conjugat\$4) with (intra-cavity)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/13 16:09
S61	13	(phase adj conjugat\$4) with (intracavity)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/13 16:14
S62	1	((phase adj conjugat\$4) with (intracavity)) and vcsel	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/13 16:15

## EAST Search History

S63	0	(phase adj conjugat\$4) with (intra adj cavity)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/13 16:16
S64	21	(phase adj conjugat\$4) same (intracavity)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 10:20
S65	8	((phase adj conjugat\$4) same (intracavity)) not ((phase adj conjugat\$4) with (intracavity))	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/13 16:16
S66	3	"4949056".pn.	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/13 16:24
S67	2	"5038359".pn.	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/13 16:24
S68	2	("4215936"   "4233571").PN.	USPAT	OR	OFF	2002/05/13 16:25
S69	2	"4949056".URPN.	USPAT	OR	OFF	2002/05/13 16:25
S70	11	(("4493086") or ("4344042") or ("4529273") or ("5208699")).PN.	USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2002/05/16 10:57
S71	8	((("4493086") or ("4344042") or ("4529273") or ("5208699")).PN.) and mirror\$1	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 09:18
S72	0	(phase adj conjugat\$4) same (intra adj cavity)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 10:43
S73	21	(phase adj conjugat\$4) same (intracavity)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 10:43
S74	1	((phase adj conjugat\$4) same (intracavity)) and vcSEL	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 10:44
S75	1090	four adj wave adj mixing	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 10:45
S76	1	(four adj wave adj mixing) same vcSEL	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 10:45
S77	3	(four adj wave adj mixing) and vcSEL	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 10:45
S78	2063	intracavity	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 10:57

## EAST Search History

S79	51	intracavity and (four adj wave adj mix\$4)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 10:58
S80	1	"5377210".URPN.	USPAT	OR	OFF	2002/05/16 11:03
S81	2251	micromirror\$1 or micro-mirror\$1 or (micro adj mirror\$1)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 14:44
S82	21	(micromirror\$1 or micro-mirror\$1 or (micro adj mirror\$1)) same conjugat\$4	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 15:10
S83	4406	mirror\$1 same conjugat\$4	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 15:11
S84	796	mirror\$1 same (phase adj conjugat\$4)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 15:11
S85	74	mirror\$1 same (phase adj conjugat\$4) same array	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 15:11
S86	2	"4949056".URPN.	USPAT	OR	OFF	2002/05/16 15:22
S87	2	("4215936"   "4233571").PN.	USPAT	OR	OFF	2002/05/16 15:27
S88	4	("4493085"   "4709368"   "5309473"   "5377210").PN.	USPAT	OR	OFF	2002/05/16 15:29
S89	5	((("5519723") or ("4344042") or ("4493086") or ("4529273") or ("5208699")).PN.	USPAT; USOCR	OR	OFF	2002/05/16 15:59
S90	0	(intracavity and (((("5519723") or ("4344042") or ("4493086") or ("4529273") or ("5208699")).PN.)) and fiber\$1	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 15:59
S91	4	intracavity and (((("5519723") or ("4344042") or ("4493086") or ("4529273") or ("5208699")).PN.)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/16 15:59
S92	14	(feedback with laser) same ((four adj wave) or fwm)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/05/17 09:30
S93	5	("4720836"   "5007066"   "5033054"   "5062155"   "5751758").PN.	USPAT	OR	OFF	2002/05/17 10:02
S94	5	"5920588".URPN.	USPAT	OR	OFF	2002/05/17 10:10
S95	3456	broadarea or broad-area or (broad adj area)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/09/16 16:58
S96	2441	intra-cavity or intracavity or (intra adj cavity)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/09/16 16:59

## EAST Search History

S97	6	(broadarea or broad-area or (broad adj area)) with (intra-cavity or intracavity or (intra adj cavity))	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/17 14:14
S98	6	(broadarea or broad-area or (broad adj area)) with (intra-cavity or intracavity or (intra adj cavity))	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/09/17 08:50
S99	6	(broadarea or broad-area or (broad adj area)) with (intra-cavity or intracavity or (intra adj cavity))	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/09/17 10:10
S100	1	("4949056").PN.	USPAT; USOCR	OR	OFF	2002/09/17 09:33
S101	2	(("4949056") or ("5038359")).PN.	USPAT; USOCR	OR	OFF	2002/09/17 09:36
S102	3	(("4949056") or ("5038359") or ("5317442")).PN.	USPAT; USOCR	OR	OFF	2002/09/17 09:41
S103	4	(("4949056") or ("5038359") or ("5317442") or ("5,920,588")).PN.	USPAT; USOCR	OR	OFF	2002/09/17 09:41
S104	35	(multi-mode or multimode or (multi adj mode)) with (intra-cavity or intracavity or (intra adj cavity))	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/09/17 09:51
S105	1	((multi-mode or multimode or (multi adj mode)) with (intra-cavity or intracavity or (intra adj cavity))) and (phase with conjug\$7)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/09/17 09:51
S106	9	(four-wave or (four adj wave) or fourwave or fwm) with (intra-cavity or intracavity or (intra adj cavity))	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/09/17 10:57
S107	6641	phase with conjug\$7	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/09/17 10:58
S108	6	((four-wave or (four adj wave) or fourwave or fwm) with (intra-cavity or intracavity or (intra adj cavity))) and (phase with conjug\$7)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/09/17 10:58
S109	2	(((four-wave or (four adj wave) or fourwave or fwm) with (intra-cavity or intracavity or (intra adj cavity))) and (phase with conjug\$7)) and (broad with area))	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/09/17 10:58
S110	946	phase adj (conjugation or conjugator\$1 or conjugating)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/10/30 09:37
S111	3170	(broad-area or (broad adj area) or multimode or multi-mode or multimodal or multi-modal) with laser\$1	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/10/30 09:48

## EAST Search History

S11 2	615	(self adj (pumped or pump or pumping))	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/10/30 09:46
S11 3	490	self-pumped or self-pump or self-pumping	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/10/30 09:46
S11 4	615	((self adj (pumped or pump or pumping))) or (self-pumped or self-pump or self-pumping)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/10/30 09:46
S11 5	2459	intra-cavity or (intra adj cavity) or intracavity	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/10/30 09:47
S11 6	3059	(intra-cavity or (intra adj cavity) or intracavity) or ((self adj (pumped or pump or pumping)))	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/10/30 09:47
S11 7	1458	((intra-cavity or (intra adj cavity) or intracavity) or ((self adj (pumped or pump or pumping)))) with laser\$1	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/10/30 09:47
S11 8	6	((broad-area or (broad adj area) or multimode or multi-mode or multimodal or multi-modal) with laser\$1) and (((intra-cavity or (intra adj cavity) or intracavity) or ((self adj (pumped or pump or pumping)))) with laser\$1)) and (phase adj (conjugation or conjugator\$1 or conjugating))	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/10/30 09:47
S11 9	38	(broad adj area) with (multimode or multi-mode or multimodal or multi-modal)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/10/30 09:48
S12 0	181	((broad-area or (broad adj area) or multimode or multi-mode or multimodal or multi-modal) with laser\$1) and (((intra-cavity or (intra adj cavity) or intracavity) or ((self adj (pumped or pump or pumping)))) with laser\$1)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/10/30 12:32
S12 1	438	((intra adj cavity) or intracavity) with pump\$4	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/10/30 12:33
S12 2	3240	((multi adj mode) or multimode or (broad adj area)) with laser\$1	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/05 09:26
S12 3	1777	phase adj conjugat\$4	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/05 09:26
S12 4	54	((multi adj mode) or multimode or (broad adj area)) with laser\$1) and (phase adj conjugat\$4)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/05 09:26

## EAST Search History

S12 5	1	ep-262177-\$ did.	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/15 09:22
S12 6	2	ep-852415-\$ did.	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/15 09:23
S12 7	2	ep-422468-\$ did.	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/15 09:30
S12 8	29	broad adj stripe adj laser\$1	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/15 09:31
S12 9	48	(US-5519723-\$ or US-5738101-\$ or US-5038359-\$ or US-6072608-\$ or US-5430748-\$ or US-5208699-\$ or US-5162872-\$ or US-4767195-\$ or US-H001625-\$ or US-5033054-\$ or US-5694239-\$ or US-5532868-\$ or US-5377210-\$ or US-5317442-\$ or US-5046824-\$ or US-4233606-\$ or US-5986234-\$ or US-5675436-\$ or US-6128118-\$ or US-5920588-\$ or US-5798853-\$ or US-5378888-\$ or US-5223838-\$ or US-5155542-\$ or US-5031234-\$ or US-4949056-\$).did. or (US-5048935-\$ or US-4987607-\$ or US-5448052-\$ or US-5337328-\$ or US-5751758-\$ or US-6307984-\$ or US-4529273-\$ or US-4493086-\$ or US-4798462-\$ or US-4344042-\$ or US-5231641-\$ or US-5319659-\$ or US-4698602-\$ or US-6144677-\$ or US-5564832-\$ or US-5434662-\$ or US-4977567-\$).did. or (WO-9856087-\$).did. or (US-20010035995-\$ or DE-3781989-\$ or EP-422468-\$ or US-5627847-\$).did.	USPAT; EPO; DERWENT	OR	OFF	2002/11/15 09:46

## EAST Search History

S13 0	2	((US-5519723-\$ or US-5738101-\$ or US-5038359-\$ or US-6072608-\$ or US-5430748-\$ or US-5208699-\$ or US-5162872-\$ or US-4767195-\$ or US-H001625-\$ or US-5033054-\$ or US-5694239-\$ or US-5532868-\$ or US-5377210-\$ or US-5317442-\$ or US-5046824-\$ or US-4233606-\$ or US-5986234-\$ or US-5675436-\$ or US-6128118-\$ or US-5920588-\$ or US-5798853-\$ or US-5378888-\$ or US-5223838-\$ or US-5155542-\$ or US-5031234-\$ or US-4949056-\$).did. or (US-5048935-\$ or US-4987607-\$ or US-5448052-\$ or US-5337328-\$ or US-5751758-\$ or US-6307984-\$ or US-4529273-\$ or US-4493086-\$ or US-4798462-\$ or US-4344042-\$ or US-5231641-\$ or US-5319659-\$ or US-4698602-\$ or US-6144677-\$ or US-5564832-\$ or US-5434662-\$ or US-4977567-\$).did. or (WO-9856087-\$).did. or (US-20010035995-\$ or DE-3781989-\$ or EP-422468-\$ or US-5627847-\$).did. ) and (broad adj strip\$4)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/15 13:33
S13 1	43	((intra adj cavity) or intracavity) same vcsel\$1	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/15 13:40
S13 2	1778	phase adj conjugat\$4	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/15 13:40
S13 3	0	(phase adj conjugat\$4) and (((intra adj cavity) or intracavity) same vcsel\$1)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/15 13:40
S13 4	68	((intra adj cavity) or intracavity) and vcsel\$1	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/15 13:40

## EAST Search History

S13 5	48	(US-5519723-\$ or US-5738101-\$ or US-5038359-\$ or US-6072608-\$ or US-5430748-\$ or US-5208699-\$ or US-5162872-\$ or US-4767195-\$ or US-H001625-\$ or US-5033054-\$ or US-5694239-\$ or US-5532868-\$ or US-5377210-\$ or US-5317442-\$ or US-5046824-\$ or US-4233606-\$ or US-5986234-\$ or US-5675436-\$ or US-6128118-\$ or US-5920588-\$ or US-5798853-\$ or US-5378888-\$ or US-5223838-\$ or US-5155542-\$ or US-5031234-\$ or US-4949056-\$).did. or (US-5048935-\$ or US-4987607-\$ or US-5448052-\$ or US-5337328-\$ or US-5751758-\$ or US-6307984-\$ or US-4529273-\$ or US-4493086-\$ or US-4798462-\$ or US-4344042-\$ or US-5231641-\$ or US-5319659-\$ or US-4698602-\$ or US-6144677-\$ or US-5564832-\$ or US-5434662-\$ or US-4977567-\$).did. or (WO-9856087-\$).did. or (US-20010035995-\$ or DE-3781989-\$ or EP-422468-\$ or US-5627847-\$).did.	USPAT; EPO; DERWENT	OR	OFF	2002/11/15 13:43
S13 6	2	((US-5519723-\$ or US-5738101-\$ or US-5038359-\$ or US-6072608-\$ or US-5430748-\$ or US-5208699-\$ or US-5162872-\$ or US-4767195-\$ or US-H001625-\$ or US-5033054-\$ or US-5694239-\$ or US-5532868-\$ or US-5377210-\$ or US-5317442-\$ or US-5046824-\$ or US-4233606-\$ or US-5986234-\$ or US-5675436-\$ or US-6128118-\$ or US-5920588-\$ or US-5798853-\$ or US-5378888-\$ or US-5223838-\$ or US-5155542-\$ or US-5031234-\$ or US-4949056-\$).did. or (US-5048935-\$ or US-4987607-\$ or US-5448052-\$ or US-5337328-\$ or US-5751758-\$ or US-6307984-\$ or US-4529273-\$ or US-4493086-\$ or US-4798462-\$ or US-4344042-\$ or US-5231641-\$ or US-5319659-\$ or US-4698602-\$ or US-6144677-\$ or US-5564832-\$ or US-5434662-\$ or US-4977567-\$).did. or (WO-9856087-\$).did. or (US-20010035995-\$ or DE-3781989-\$ or EP-422468-\$ or US-5627847-\$).did. ) and vcsel\$1	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/15 13:49
S13 7	2	"5,920,588".pn.	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/15 13:49

## EAST Search History

S13 8	2	"5033054".pn.	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/15 15:20
S13 9	2	"5,675,436".pn.	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/15 15:20
S14 0	2	"5,675,436".pn.	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/17 14:03
S14 1	2	"4,949,056".pn.	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/17 14:03
S14 2	2	"5317442".pn.	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/17 14:08
S14 3	8	"5317442".URPN.	USPAT	OR	OFF	2002/11/17 14:04
S14 4	5	("3779492"   "4063819"   "4866781"   "5166507"   "5317442").PN.	USPAT	OR	OFF	2002/11/17 14:07
S14 5	64	359/300.ccls.	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/17 14:08
S14 6	0	vcsel and 359/300.ccls.	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/17 14:09
S14 7	2	vcsel same (pcm or conjugat\$4)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/17 14:09
S14 8	0	(broadarea or broad-area or (broad adj area)) with (self adj pump\$4)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/17 14:16
S14 9	0	(broadarea or broad-area or (broad adj area)) same (self adj pump\$4)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/17 14:17
S15 0	91	((self adj pump\$4) or (intracavity or (intra adj cavity))) with (conjug\$4)	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/17 14:25
S15 1	14	(self adj pump\$4) and multimode	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/17 14:26
S15 2	0	single adj gain adj stripe	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/17 15:58
S15 3	149	(single adj2 stripe) with laser\$1	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/18 08:19